

**REMARKS**

Claims 38, 39, 43 – 49, and 54 – 61 remain in this application. Claims 40 – 42 and 50 – 53 have been canceled. Claims 38, 43, and 47 have been amended. Reconsideration of this application in view of the amendments noted is respectfully requested.

Independent claims 38 and 47 have been amended to include the limitations that cladding is applied in the form of a continuous weld bead or a plurality of side-by-side beads, which is supported by now canceled claim 40. Claims 38 and 47 have also been amended to include the limitation that the substrate is formed into a cylindrical shape, which is supported by paragraph [0015] of the application publication. Claims 38 and 47 have further been amended to include the limitations that monitoring of a profile(s) of the weld bead(s) is carried out as a part of a procedure to maintain a desired profile for the cladding where the thickness of the substrate before cladding is represented by the distance  $x$  and the thickness of the cladding is represented by a distance  $y$ , which excludes the depth of penetration of the weld bead(s) into the upper surface of the substrate, the manufactured hardfaced plate having a thickness,  $x+y$  of less than 5mm, which is supported by now canceled claim 41 and paragraphs [0009] and [0035] – [0037] of the application publication.

In the Office Action, claims 38 – 61 were rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. (U.S. Patent No. 5,362,937, hereinafter “Browne”) in view of Nadeau et al. (U.S. Patent No. 4,733,051, hereinafter “Nadeau”) and Carpenter et al. (U.S. Patent No. 2,427,350, hereinafter “Carpenter”). Applicant respectfully traverses this rejection.

Applicant maintains its previous arguments with respect to the patentability of the claims over any possible combination of Browne with Nadeau and Carpenter.

Furthermore, with respect to independent claims 38 and 47, Browne does not disclose or fairly suggest forming a plate into a cylinder and then monitoring the profile in order to maintain a desired profile for cladding. In this regard, Browne states at column 1, line 40 that “[i]t is an object of the present invention to provide an improved method of manufacture . . . by applying weld metal to form an overlay on the plate while the plate is in planar form

and hence without any need for the step of cylindrical formation and subsequent flattening to planar form.” Therefore, Browne teaches away from the presently claimed invention.

Turning to Nadeau, Nadeau does not disclose or fairly suggest a method of manufacturing a hardfaced plate by cladding. Nadeau discloses butt welding which is a process for joining two workpieces together. Butt welding is distinct from cladding. Cladding is understood in the art to be a different process than butt welding, and butt welding cannot be used to provide a hardfaced plate.

Further, Nadeau does not disclose monitoring the profile such that the hardfaced plate has a thickness of less than 5 mm. And Browne and Carpenter fail to remedy this deficiency.

Moreover, applicant submits that one of ordinary skill in the art would not combine Nadeau with Browne. First, Browne teaches away from forming a plate into a cylinder, while Nadeau generally relates to pipe welding. Second, Nadeau relates to butt welding, which is a different process than cladding. Therefore, it would involve more than routine skill in the art to combine these different processes, if it is even possible.

For all of these reasons, independent claims 38 and 47 are patentable over any possible combination of Browne with Nadeau and Carpenter. The dependent claims are also patentable at least due to their dependency from one of the base claims. Claims 40 – 42 and 50 – 53 have been canceled, thereby obviating the rejection of these claims. Accordingly, applicant respectfully requests that the Section 103(a) rejection of claims 38 – 61 as being unpatentable over Browne in view of Nadeau and Carpenter be withdrawn.

A Petition For A Two-Month Extension Of Time and a PTO-2038 authorizing payment in the amount of \$245.00 to cover the fee under 37 CFR 1.17(a)(2) are included with this response.

This amendment and request for reconsideration is believed to be fully responsive to the comments and suggestions of the examiner and to place this application in condition for allowance. Favorable action is requested.

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Respectfully submitted,  
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